

In the Claims:

1           1. [previously presented] A method of mobile device control comprising:  
2           moving a surrogate under wireless control by a user;  
3           during the moving, detecting unsuitable degradation of wireless  
4           communications of the wireless control; and  
5           in response to the detecting and while the surrogate is still receiving the  
6           wireless communications, autonomously moving the surrogate to provide suitable  
7           wireless communications of the wireless control.

1           2. [original] The method as claimed in claim 1 additionally comprising:  
2           autonomously moving the surrogate along a previously determined route.

1           3. [previously presented] The method as claimed in claim 1 wherein:  
2           autonomously moving the surrogate to provide suitable wireless  
3           communications of the wireless control occurs after passage of a period of time  
4           following the detecting of the degradation; and  
5           the method further comprises after the detecting of the unsuitable  
6           degradation, the surrogate loitering near a location where the unsuitable degradation  
7           was detected during the passage of the period of time.

1           4. [cancelled].

1           5. [previously presented] The method as claimed in claim 1 wherein:  
2           moving the surrogate under wireless control includes logging forward motion  
3           using at least one of dead reckoning, odometry, directional measurement,  
4           differential wheel rotation, or a combination thereof.

1           6. [previously presented] The method as claimed in claim 1 wherein:  
2           autonomously moving the surrogate uses logged information of forward  
3 movement using at least one of dead reckoning, odometry, directional  
4 measurement, differential wheel rotation, or a combination thereof; and  
5           autonomously moving the surrogate uses waypoints back along a forward  
6 movement path for backtracking movement.

1           7. [previously presented] A method of mobile telepresencing comprising:  
2           moving a surrogate under real-time wireless control by a user;  
3           autonomously moving the surrogate to an area with adequate wireless  
4 coverage to regain wireless control when the wireless control is lost for a period of  
5 time; and  
6           while the surrogate is autonomously moving, activating a human perceptible  
7 indicator which is perceptible to humans in the presence of the surrogate.

1           8. [cancelled].

1           9. [original] The method as claimed in claim 7 wherein:  
2           losing wireless control includes degradation of the control to a threshold  
3 level;  
4           autonomously moving the surrogate to regain wireless control occurs after a  
5 period of time.

1           10. [currently amended] The method as claimed in claim 7 wherein:  
2           autonomously moving the surrogate includes:  
3           backtracking while measuring distance and avoiding collisions by the  
4 surrogate;  
5           stopping the surrogate for an obstacle; and  
6           ~~automatically without user intervention~~ resuming backtracking after removal  
7 of the obstacle.

1           11. [cancelled].

1           12. [previously presented] The method as claimed in claim 7 wherein:

2           autonomously moving the surrogate to backtrack uses logged information of  
3 forward movement using at least one of dead reckoning, odometry, directional  
4 measurement, differential wheel rotation, or a combination thereof;

5           autonomously moving the surrogate to backtrack uses a slower speed than  
6 forward speed; and

7           autonomously moving the surrogate uses waypoints back along a forward  
8 movement path for backtracking movement considering the slower speed of  
9 backtracking.

1           13. [currently amended] A mobile device control system comprising:

2           a surrogate movable under wireless control by a user; and

3           a computer/transceiver system on the surrogate for ~~detecting loss of the~~  
4 ~~wireless control, configuring the surrogate to loiter for a non-zero amount of time~~  
5 ~~following the loss of the wireless control near a location at which the loss of the~~  
6 ~~wireless control was detected, monitoring for return of the wireless control during~~  
7 ~~the non-zero amount of time, and~~ moving the surrogate to regain wireless control  
8 independently of the wireless control after passage of ~~the~~ a non-zero amount of  
9 time following ~~the~~ loss of the wireless control.

1           14. [cancelled].

1           15. [previously presented] The system as claimed in claim 13 wherein:

2           the computer/transceiver system for autonomously moving the surrogate to  
3 regain wireless control occurs after the surrogate remains stationary for the non-  
4 zero amount of time.

1           16. [original] The system as claimed in claim 13 wherein:

2           the computer/transceiver system for autonomously moving the surrogate  
3 includes measuring distance and avoiding collisions by the surrogate.

1           17. [cancelled].

1           18. [previously presented] The system as claimed in claim 13 wherein:

2           the computer/transceiver system uses logged information of forward  
3 movement using at least one of dead reckoning, odometry, directional  
4 measurement, differential wheel rotation, or a combination thereof; and

5           the computer/transceiver system calculates waypoints back along a forward  
6 movement path for backtracking movement.

1           19. [currently amended] A mobile telepresencing system comprising:

2           a surrogate movable under wireless control by a user; and

3           a computer/transceiver system for determining when the wireless control is  
4 lost and responsive to the determining, autonomously moving the surrogate to an  
5 area not currently receiving adequate coverage of the wireless control, but in which  
6 the surrogate previously experienced adequate coverage of the wireless control, to  
7 regain adequate coverage of the wireless control, ~~and loitering in the area for the~~  
8 ~~wireless control to return.~~

1           20. [original] The system as claimed in claim 19 additionally comprising:

2           the computer/transceiver system for autonomously moving the surrogate  
3 along at least one of a previously determined route, a distance, a destination, a  
4 direction, or a combination thereof.

1           21. [original] The system as claimed in claim 19 wherein:

2           the computer/transceiver system for determining degradation of the  
3 wireless control to a threshold level;

4           the computer/transceiver system for autonomously moving the  
5 surrogate to regain wireless control occurs after a period of time.

1           22. [currently amended] The system as claimed in claim 19 wherein:

2           the computer/transceiver system for autonomously moving the surrogate  
3 includes:

4           backtracking means for measuring distance and avoiding collisions by  
5 the surrogate during backtracking;

6           stopping means for stopping the surrogate for an obstacle; and

means for ~~automatically without user intervention~~ resuming backtracking after removal of the obstacle.

23. [cancelled].

24. [previously presented] The system as claimed in claim 19 wherein:  
the computer/transceiver system uses logged information of forward movement using at least one of dead reckoning, odometry, directional measurement, differential wheel rotation, or a combination thereof for backtracking;  
the computer/transceiver system provides a slower speed than forward speed for backtracking by the surrogate; and  
the computer/transceiver system uses waypoints back along a forward movement path for backtracking movement considering the slower speed of backtracking.

25. [previously presented] The method as claimed in claim 1 wherein:  
the detecting comprises comparing a performance parameter associated with the wireless communications with a threshold.

26. [previously presented] The method as claimed in claim 25 wherein:  
the detecting comprises determining that a current non-zero data rate at which the surrogate is successfully transmitting data via the wireless communications is less than a desired data rate.

27. [previously presented] The method as claimed in claim 26 further comprising:  
prior to the detecting, wirelessly transmitting a video signal at or above the desired rate from the surrogate to the user.

1           28.   [previously presented] The method as claimed in claim 10 further  
2 comprising:  
3           prior to the resuming of the backtracking, sensing removal of the obstacle;  
4 and  
5           wherein the resuming is responsive to the sensing.

1           29.   [previously presented] The method as claimed in claim 25 wherein the  
2 detecting comprises determining that a current transmission delay associated with  
3 packets received by the surrogate is greater than an acceptable transmission delay.

1           30.   [previously presented] The system of claim 13 wherein the  
2 computer/transceiver system is configured to configure the surrogate to remain  
3 stationary near the location for the non-zero amount of time following the loss of  
4 the wireless control.

1           31.   [previously presented] The method of claim 7 wherein the surrogate  
2 comprises the human perceptible indicator.

1           32.   [new] The system of claim 13 wherein the computer/transceiver  
2 system is configured to detect loss of the wireless control, configure the surrogate  
3 to loiter for the non-zero amount of time following the loss of the wireless control  
4 near a location at which the loss of the wireless control was detected, and monitor  
5 for return of the wireless control during the non-zero amount of time.

1           33.   [new] The system of claim 19 wherein the computer/transceiver  
2 system is configured to loiter in the area for the wireless control to return.

1           34.   [new] The method of claim 10 wherein the resuming backtracking  
2 comprises automatically without user intervention resuming backtracking.

1           35. [new] The system of claim 22 wherein the means for resuming  
2 backtracking after removal of the obstacle comprises means for automatically  
3 without user intervention resuming backtracking after removal of the obstacle.